Plate 88. Figs. 22 and 23. Balansia discoidea P. Hennings, on stem of Chloris distichophylla, Brazil.

Fig. 22, real size, pseudosclerotium and stromata at *a*.

Fig. 23, same magnified 3 times real length and width.

Fig. 24, Balansia discoidea P. Hennings, on stem of Andropogon, Kansas, magnified 3 times the real length.

Figs. 25-27, Dothichloë atraemntosa (B. & C.) Atkinson.

Fig. 25, photograph, real size, of Andropogon plant from Alabama showing black effuse stromata on under side of the leaves. This plant indicates that when the host and fungus were young the young stroma entirely surrounded the cluster of leaves, but when the leaves elongated they tore the enveloping stroma apart.

Fig. 26, a single stroma on under side of a leaf magnified 3 times the real length and width.

Fig. 27, photograph magnified 3 times the real length and width of very thin stroma on leaf of grass, of No. 683 E. & E. N. A. F. This is the same form as occurs in Rav. F. C. Ex. No. 100 which usually bears the name "Dothidea atramentaria B. & C." See text for discussion.

Figs. 28, 29, Dothichloë aristidae Atkinson, on stems of Aristida purpurascens, Alabama.

Fig. 28, real size.

Fig. 29, magnified three times the real length and width. Note that the perithecia are larger and much more prominent in Fig. 29 than in Fig. 20 where they do not show because not so prominent.

ANOTHER FLY AGARIC.

D. R. SUMSTINE.

Amanita muscaria is called the fly agaric because infusions of it are poisonous to flies. It has now, however, a keen rival for this reputation in another species of the same genus. Last summer while drying specimens of *Amanita olitaria Bull,* a number of flies were attracted to them. After the flies had remained on the plants for a short time they fell over apparently dead. This continued until thirty-nine fly mycophagists had become the victims of some narcotic contained in the mushrooms. The box with flies and plants was then set aside for future study. After two hours the box was again examined, but the flies which once were dead were now alive and had departed with no more serious results possibly than a severe headache from their mycological "booze."

Several experiments were made with other specimens of the same species and the same results were obtained. It seems that this plant has some property that acts as an intoxicant or soporific to flies. It is reported by some writers as edible and by others as poisonous..

Wilkinsburg, Pa.

NOTES ON UREDINEAE. IV.

E. D. W. HOLWAY.

PUCCINIA UNIFORMIS Pammel & Hume.

An examination of the type specimen of this species showed that the host was not Rumex pauciflorus, but Polygonum, and the fungus does not differ in any way from Puccinia Bistortae (Sta.) DC.

PUCCINIA OBLICUS B. & C.

This species was said to be upon some plant resembling "chick-weed;" specimens examined were too small to determine the host plant, but the Puccinia seems to differ in no way from Puccinia lateritia B. & C. and the host is no doubt one of the Rubiaceae.

UROMYCES OBLONGA Vize.

This was published as found on "Burr Clover." An examination of a specimen in the Herbarium of Dr. Farlow, probably sent by Harkness, disclosed that it was on Trifolium and identical with Uromyces minor Schroeter. As the name used by Vize is older, it must be adopted for this plant.

PUCCINIA FRAGILIS Tracy & Gall.

The specimens of this species in Baker, Tracy & Earle, Plants of So. Col. 423a, prove to be Puccinia plumbaria Peck, and the host is a Phlox, perhaps Phlox longifolia. I have examined the type, which is also on Phlox.

PUCCINIA PURPUSII P. Henn.

This was reported as being on Arabis, but is Puccinia plumbaria Peck, on some Phlox, or closely allied genus.

PUCCINIA ARABICOLA E. & E.

The type specimen of this is a fragment of a leaf, but the fungus differs in no way from the Eastern U. S. form of Puccinia plumbaria which is found on Phlox divaricata.